

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Raymond J. Dattwyler, Gerald Seinost, Daniel Dykhuizen, Benjamin J. Luft and Maria J.C. Gomes Solecki

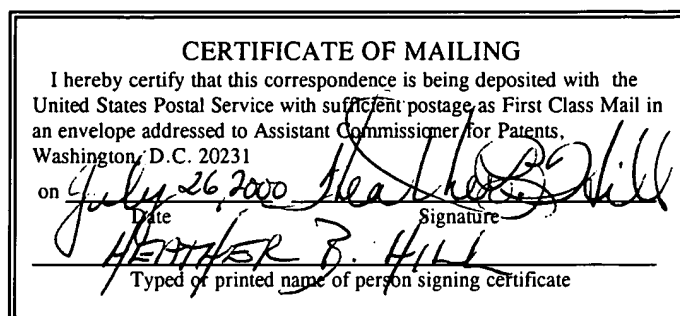
Serial No.: 09/596,746

Group Art Unit: 1645

Filed: June 19, 2000

Examiner: R. Swartz

For: Groups of Borrelia Burgdorferi and Borrelia Afzelii That Cause Lyme Disease in Humans



TRANSMITTAL OF SUBSTITUTE SEQUENCE LISTING AND
PRELIMINARY AMENDMENT

Box Sequence

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

Transmitted herewith is a copy of a Substitute "Sequence Listing" in paper form (sheets 1/102 through 102/102) for the above-identified patent application as required by 37 C.F.R. §§ 1.825(a) and 1.821(c), and a copy of the Substitute "Sequence Listing" in computer readable form as required by 37 C.F.R. §§ 1.825(b) and 1.821(e).

This Substitute "Sequence Listing" is being filed to correct an inadvertent error that was discovered in the originally filed "Sequence Listing" subsequent to the filing of that "Sequence Listing". It was determined that the listed protein (PRT) sequences which are the proteins translated from the immediately preceding gene (DNA) sequence in the "Sequence Listing" lacked the initial methionine (Met) amino acid residue,

although the amino acid sequence which accompanies the gene sequence in the DNA sequence listing retains the initial Met. It has been determined that this Met omission occurred as a result of a flaw in the sequence listing program (FastSeq). This flaw has now been corrected. Since the initial Met is present in the protein sequence that accompanies the respective DNA sequence in the sequence listing, it is believed by applicants that no new matter is present in this Substitute "Sequence Listing" where the initial Met occurs in both the protein sequence listing and in the identical protein sequence which accompanies the respective coding DNA sequence in the sequence listing.

As required by 37 C.F.R. § 1.825(b), Applicant's Attorney hereby states that the contents of the Substitute "Sequence Listing" in paper form and in the computer readable form submitted herewith are the same and, as required by 37 C.F.R. § 1.825(a), also states that the submission includes no new matter of a substantive nature.

Please amend the above-identified application as follows:

In the Specification

Please replace the "Sequence Listing" filed on June 19, 2000 (sheets 1/102 through 102/102) with the attached Substitute "Sequence Listing" (sheets 1/102 through 102/102) comprising SEQ ID NOS: 1-84.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By Richard W. Wagner

Richard W. Wagner
Registration No. 34,480
Telephone (781) 861-6240
Facsimile (781) 861-9540

Lexington, Massachusetts 02421-4799

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